## *Wh*-questions and focus in predicate-initial languages: evidence from Tsimshianic

**Three generalizations about *wh*-questions in predicate-initial languages.** It has been established at least since Greenberg (1963) that in V-initial (or more accurately, predicate-initial or P1) languages, the *wh*-phrase in *wh*-questions overwhelmingly occurs in initial position (WH1) (see also Keenan (1978); Hawkins (1983)). More recent work on P1 languages has discovered two related generalizations: first, in argument positions, *wh*-phrases often only have existential, not interrogative meanings; and second, P1 languages often lack multiple *wh*-questions (e.g. Caponigro et al. 2020; Coon et al. 2021). We refer to these three characteristics together as the *P1 wh-Q Profile*, which is exemplified below, using data from Sm'algyax (a.k.a. Coast Tsimshian: ISO 639-3 tsi), a Tsimshianic language spoken in British Columbia and Alaska.

(1) Giigis Lucy ła'at.
buy-TR=PN Lucy ball
'Lucy bought a ball.' (P1/VSO)

(2) **Naa**=yu=t in sigwaanü gwa'a?
who=INT=3 AX cook this
'**Who** cooked this?' (WH1)

(3) Ksi-niidz-u **naa**.
out=see-1SG who
'I picked out **a person**.' (*wh*-indef)

(4) #**Naa**=yu=t in sigwaanü **goo**?
who=INT=3 AX cook what
#'**Who** cooked **what**?' (*mult. *wh*)

**Three ways to derive *wh*-questions in predicate-initial languages.** Syntactically, there are at least three ways to derive *wh*-initial questions in a P1 language (see Potsdam and Polinsky (2011) on Polynesian): via conventional *wh*-movement, via a clefting strategy, and via *wh*-predication. The last of these strategies involves a *wh*-word which behaves syntactically like any other nominal predicate, taking a DP argument which either takes the form of a simple nominal or (more frequently) of a headless relative clause. *Wh*-predicates are often referred to in the literature as pseudo-clefts (after their closest English analogue) or (confusingly) as clefts (see e.g. Kroeber 1999 on Salish) but they are distinct from both, since they lack a copula and associated expletive subject. *Wh*-movement and *wh*-predication are schematized in (5) and (6).

(5) *Wh*-movement
$[_{CP}\ wh\ [_{C'}\ C\ [_{TP}\ \ldots\ \underline{\text{wh}}\ ]]]$

(6) *Wh*-predication
$[_{PredP}\ wh.\text{PRED}\ [_{DP/HRC}\ \ldots\ ]]$

*Wh*-predicates are prevalent in P1 languages of the Pacific Northwest, where they are dominant in Salish and North Wakashan, and present alongside *wh*-movement in Tsimshianic.

***Wh*-predication and the P1 *wh*-Q Profile.** In a recent paper on the P1 Mayan language Chuj, Royer et al. (2025) claim that the three generalizations in the P1 *wh*-Q Profile (as well as a fourth, so-called "pied piping with inversion" (Smith Stark 1988)) all follow from the fact that Chuj exclusively uses the *wh*-predication strategy in (6). In the first part of this paper, we use data from the Tsimshianic languages Sm'algyax (a.k.a. Coast Tsimshian: ISO 639-3 tsi) and Gitksan to argue against this claim. We show that (i) both languages employ *wh*-movement as well as *wh*-predication to derive *wh*-Qs (see Davis and Brown 2011; Davis and Nederveen 2021 on Gitksan (ISO 639-3 git), and Brown and Davis 2024 on Sm'algyax), and (ii) that though the movement and predication structures are separable on a number of syntactic diagnostics, *both* show the P1 *wh*-Q Profile (as shown in (1)–(4)). Evidence for the distinction between (5) and (6) in Sm'algyax comes from interrogative clitic linearization. Brown and Davis (2024) shows that the interrogative clitic *=(d)u* always linearizes to the left of the final DP in the

clause, phonologically leaning left; in *wh*-questions formed via *wh*-movement, *=(d)u* occurs clause internally, while those formed via *wh*-predication, which optionally feature the relative pronoun *gu*, *=(d)u* necessarily precedes the entire HRC constituent.

(7) a. Naa=ł in=t yoyksa**=du** nooł __?
who=CN AX=3.I wash-3**= INT** dish
'Who washed the dishes?' (*wh*-movement)

b. Naa=**du** [$_{\text{HRC}}$ **gu** in=t yoyks=a nooł]?
who**= INT** **REL** AX=3 wash=CN dish
'Who washed the dishes?' (wh-predication)

**Deriving the P1 *wh*-Q Profile.** We argue instead that the P1 *wh*-Q Profile follows from an independent property of P1 languages: (contrastive) focus is always realized at the left edge of the clause. Adopting the "quexistential" framework of Hengeveld et al. (2023), based on generalizations in Haida (2007), we assume that *wh*-phrases must always be focused under their question interpretation: *interrogative interpretation* ⇒ *contrastive focus*. The basic reason for this is that questions inherently require contrasting alternatives, unlike other phrases, which only do so when focused. Hengeveld et al. capture this difference by drawing a distinction between *external* and *internal* contrast. External contrast represents the standard case of alternatives provided by the discourse context, which provides a set of propositions representing the focus semantic value of a proposition containing a non-*wh* focused phrase. Internal contrast represents the special case of *wh*-questions, whose ordinary semantic value is a set of propositions: focusing the *wh*-phrase creates the contrast which turns the ordinary semantic value of a *wh*-Q into its focus semantic value.

The P1 *wh*-Q profile now hinges on the location of focus. While dedicated phonetic studies are scarce in languages of the Pacific Northwest, there are indications that P1 *wh*-Q languages lack the ability to (contrastively) focus constituents using intonation alone. Preliminary evidence from Tsimshianic (Brown 2021) suggests that the left edge of the clause is the locus of nuclear pitch: the first stressed element in the clause carries the nuclear pitch, and crucially, *wh*-question intonation and focus intonation are identical.

Assuming the validity of this generalization, the characteristics of the P1 *wh*-Q Profile fall out. First, the location of *wh*-phrases at the left periphery of the clause follows from the fact that they must be focused in order to yield a focus semantic value, as required for an interrogative construal of a quexistential. Second, the fact that quexistentials in argument position only have non-interrogative existential meanings follows from the fact that there is no way to contrastively focus an expression in situ. Third, the absence of multiple *wh*-questions follows for the same reason: assuming only one expression can be contrastively focused per clause, an in situ *wh*-phrase in a potential multiple *wh*-question can only be construed as a non-interrogative existential (but see Sabel (2003) on muliple *wh*-fronting in Malagasy (VOS, Austronesian), an apparent *wh*-predication language.).

**Implementation.** Hengeveld et al. (2023) assume that quexistential *wh*-phrases are "born existential", but are also alternative-generating. On their existential (in situ) readings, the alternatives are bound by an exhaustification operator, following Chierchia (2013), Chierchia and Liao (2015). On their question reading, we assume that a "contrast" operator at the left edge of the clause is responsible for converting alternatives into a focus semantic value.

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